SYLLABUS
University year 2025-2026
Year of study II / Semester II

1. Information on academic programme

1.1. University	**"1 Decembrie 1918" University of Alba Iulia**
1.2. Faculty	**Faculty of Informatics and Engineering**
1.3. Department	**Informatics, Mathematics and Electronics**
1.4. Field of study	**Computer Science**
1.5. Cycle of study	**Undergraduate**
1.6. Academic programme / Qualification	**Computer Science / developers ESCO-08: 2511/ Systems Analyst, 2512/ Software developers** **Analyst 251201** **Computer System Programmer 251204** **Computer System Engineer 251203**

2. Information of Course Matter

2.1. Course	WEB applications development	2.2. Code	CSE211
2.3. Course Leader		Dr. SIGHENCEA Bogdan - Ilie	
2.4. Seminar Tutor		Dr. SIGHENCEA Bogdan - Ilie	

2.5. Academic Year	II	2.6. Semester	II	2.7. Type of Evaluation (E – final exam/ CE - colloquy examination / CA -continuous assessment)	E	2.8. Type of course (C– Compulsory, Op – optional, F - Facultative)	C

3. Course Structure

3.1. Weekly number of hours	4	3.2. course	**2**	3.3. seminar, laboratory	**2**
3.4. Total number of hours in the curriculum	56	3.5. course	**28**	3.6. seminar, laboratory	**28**

Allocation of time:	hours
Individual study of readers	**20**
Documentation (library)	**20**
Home assignments, Essays, Portfolios	**20**
Tutorials	**-**
Assessment	**9**
Other activities …….	**-**

3.7 Total number of hours for individual study	69
3.8 Total number of hours in the curriculum	56
3.9 Total number of hours in the curriculum	125
3.10 Number of ECTS **	5

4. Prerequisites (where applicable)

4.1. curriculum-based	Object – oriented programming
4.2. competence-based	- high level language programming

5. Requisites (where applicable)

5.1. course-related	Room equipped with video projector / board / Microsoft Teams Platform
5.2. laboratory-based	Laboratory – computers / Microsoft Teams Platform

6. Specific competences to be aquired (chosen by the course leader from the programme general competences grid)

Professional competences	Programming in high-level languages Development and maintenance of computer applications
Transversal competences	CT1 The application of rules for organized and efficient work, of responsible attitudes towards the scientific and didactic domain, for the creative realization of one'sown potential following the principles and norms of professional. Ethics.

7. Course objectives (as per the programme specific competences grid)

7.1 General objectives of the course	*Students should ne able to describe fundamental concepts regarding the functioning of the Internet and be able to design, programm, and implement a simple web application*
7.2 Specific objectives of the course	- Fundamental knowlsedge about trasnmission and displaying infromation on the WEB - Using methods, tools and languages dedicated to creating web applications - The capacity to develop a web application starting from given specifications

8. Course contents *

8.1 Course	Teaching methods	Obs.
1. Working environment, tools. 2. Foundations of PHP – variables, data types, programming structures, PSR introduction 3. Include, require, more PSR rules 4. OOP in PHP, PSR for OOP 5. Client-server: URL, URi, URN, HTTP protocol 6. Data transfer in PHP - get & post. 7. MySQL & PHP: procedural, OOP, PDO 8. Sessions, cookies. Unit testing 9. PHP security 10. Web server configurations, deployment, .htaccess	Lecture, discussions, presentation	

8.2. Seminars - laboratories	Teaching methods	Observations
1. HTML/CSS review 2. Basic PHP programming, parsing text files 3. OOP exercises 4. Data transfer – GET, POST, forms 5. PHP & MySQL – CRUD 6. Class project: freelancer page with DB 7. Sign-up, authentication, session & cookies 8. PHP file upload, unit testing 9. Individual project 10. Deployment, security testing	Discussion, presentation, exercices	

References

1. Robin Nixon, *Learning PHP, MySQL & JavaScript, 6th Edition*. O'Reilly Media, Inc., 2021, ISBN: 9781492093824
2. Chris Snyder, Thomas Myer, Michael Southwell, *Pro PHP Security: From Application Security Principles to the Implementation of XSS Defenses*, Apress; 2nd ed. Edition.
3. David Gourley, Brian Totty, Marjorie Sayer, Anshu Aggarwal, Sailu Reddy, *HTTP: The Definitive Guide (Definitive Guides) 1st Edition,* O'Reilly Media (2002).

9. Corroboration of course contents with the expectations of the epistemic community's significant representatives, professional associations and employers in the field of the academic programme

NA

10. Assessment

Activity	10.1 Evaluation criteria	10.2 Evaluation methods	10.3 Percentage of final grade
10.4 Course	Final evaluation	*Written assessment*	70%

10.5 Seminar/laboratory	Continuous evaluation	*Solving proposed assignments*	30%

10.6 Minimum performance standard
- Final laboratory project must be implemented using HTML 5/CRUD.
- Obtaining a minimum grade of 5 on both assessments (exam/lab).
- Final written assessment: minimum 4 correct subjects, out of 9 subjects.
- For participation in the first exam, attendance is mandatory, in proportion to 100% (laboratory).
- Activities can be recovered through additional activities, during the semester, within the limit of 50% of the total required.

Submission date
29.09.2025

Course leader signature
Dr. Bogdan Sighencea

Seminar tutor signature
Dr. Bogdan Sighencea

Date of approval by Department

Department director signature
Lect.dr.ing. Mihaela ALDEA

Data Date of approval by Faculty Council

Signature of the Dean
Conf.dr.ing. Corina ROTAR